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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,753	11/15/2002	Charles S. Chiu	BUR920020064	9185
23550	7590	07/13/2005	EXAMINER	
HOFFMAN WARNICK & D'ALESSANDRO, LLC			PHAN, THAI Q	
75 STATE STREET			ART UNIT	
14TH FL			PAPER NUMBER	
ALBANY, NY 12207			2128	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/065,753

Applicant(s)

CHIU ET AL.

Examiner

Thai Q. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11-15 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 3,10 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is in response to patent application S/N: 10/065,753, filed on 11/15/2002. Claims 1-20 are pending in the action.

#### ***Drawings***

The Drawings filed on 11/15/2002 are acceptable for examination.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4-9, 11-15, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Soudier, C. (US patent application publication no. 2002/0193978 A1).

As per claim 1, Soudier anticipates a method and system for simulating and generating an equivalent power model for an integrated circuit with feature limitations very identical to the claimed invention. According to Soudier, the method includes steps

Generating a partitioned model by partitioning the circuit into a plurality of simulation windows having a similar characteristics [0042],

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Applying by converting i/o within each simulation window to a current source and generating the equivalent model for at least one simulation window based on an observed current change rate of the simulation window as claimed [0063]-[0139].

As per claim 2, Soudier anticipates steps of simulating operation of the model, and monitoring a current change rate of the simulation window [0063] to [0139],

Converting the current change rate of each simulation window for the I/O of the equivalent model.

As per claims 4-7, Soudier anticipates the claimed limitations for circuit element characteristics such as inductance, capacitance, etc.

As per claim 8, Soudier anticipates a method, system and computer program product having computer readable medium and code for simulating and generating an equivalent power model for an integrated circuit with feature limitations very identical to the claimed invention. According to Soudier, the computer program product includes means for performing:

Generating a partitioned model by partitioning the circuit into a plurality of simulation windows having a similar characteristics [0042],

Applying by converting i/o within each simulation window to a current source and generating the equivalent model for at least one simulation window based on an observed current change rate of the simulation window as claimed [0063]-[0139].

As per claim 9, Soudier anticipates computer program product means for simulating operation of the model, and monitoring a current change rate of the simulation window [0063] to [0139],

Converting the current change rate of each simulation window for the I/O of the equivalent model.

As per claims 11-14, Soudier anticipates the claimed limitations for circuit element characteristics such as inductance, capacitance, etc.

As per claim 15, Soudier anticipates a method and system for simulating and generating an equivalent power model for an integrated circuit with feature limitations very identical to the claimed invention. According to Soudier, the system includes means:

Generating a partitioned model by partitioning the circuit into a plurality of simulation windows having a similar characteristics [0042],

Applying by converting i/o within each simulation window to a current source and generating the equivalent model for at least one simulation window based on an observed current change rate of the simulation window as claimed [0063]-[0139].

As per claims 17-20, Soudier anticipates the claimed limitations for circuit element characteristics such as inductance, capacitance, etc.

#### ***Allowable Subject Matter***

Claims 3, 10 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3, 10 and 16 further require the claimed features of converting to actual i/o based on known current rate changes of i/o and maintaining actual ratios of different

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types of i/o within each simulation window, which have not been disclosed in the closest prior art of record.

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US patent no. 5,146,460, issued to Ackerman et al, on 09-1992
2. US patent no. 6,480,816, issued to Dhar, Sanjay, on 11-2002
3. US patent 6,584,606, issued to Chiu et al, on 06-2003
4. US patent application publication 2005/0143966, issued to McGaughy, Bruce, on 06-2005.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Q. Phan whose telephone number is 571-272-3783. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached on 571-272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 08, 2005

A handwritten signature in black ink, appearing to read 'Thai Phan', is positioned above the printed name.

Thai Phan  
Patent Examiner